

Claims

1. A process for making granules of an insecticidally active phosphoroamido(di)-thioate solid by compacting a phosphoroamido(di)thioate solid that has been milled (a) to an average crystal length of less than 150 μm and an average crystal width of less than 40 μm , or (b) to a particle size distribution having at least 67 wt% of said solids within a size of 4.6-88 μm .
2. The process according to claim 1, wherein said phosphoroamido(di)thioate solids has been jet milled.
3. The process according to claim 1, wherein said phosphoroamido(di)thioate solid exhibits a mean size within the range of 10-29 μm .
- 15 4. The process according to claim 1, wherein said phosphoroamido(di)thioate solid exhibits a mean size within the range of 12-25 μm .
5. The process according to claim 1, wherein said phosphoroamido(di)thioate solid exhibits a mean size within the range of 15-23 μm .
- 20 6. The process according to claim 1, wherein said phosphoroamido(di)thioate solid exhibits a standard deviation of less than 40.
7. The process according to claim 1, wherein said phosphoroamido(di)thioate solid exhibits a standard deviation of less than 35.
- 25 8. The process according to claim 1, wherein said phosphoroamido(di)thioate solid exhibits a standard deviation of less than 30.
- 30 9. The process according to claim 1, wherein said phosphoroamido(di)thioate solid has been milled to a particle size distribution whereby at least 68 wt% of said solid has a particle size of 4.6-88 μm .
10. The process according to claim 1, wherein said phosphoroamido(di)thioate solid has been milled to a particle size distribution whereby at least 70 wt% of said solid has a particle size of 4.6-88 μm .
- 35 11. The process according to claim 1 wherein said phosphoroamido(di)thioate solid has been milled to a particle size distribution whereby at least 52 wt% of said sol-

id has a size within the range of 4.6-37 μm and less than 14 wt% of said solid has a size within the range of 44-88 μm .

12. The process according to claim 10 wherein said phosphoroamido(di)thioate solid has been milled to a particle size distribution whereby at least 55 wt% of said solid has a size within the range of 4.6-37 μm and less than 13 wt% has a size within the range of 44-88 μm .
13. The process according to claim 10 wherein said phosphoroamido(di)thioate solid has been milled to a particle size distribution whereby at least 60 wt% of said solid has a size within the range of 4.6-37 μm and less than 11 wt% has a size within the range of 44-88 μm .
14. The process of claim 1 wherein the compacting step is performed by passing the milled solid, a binding agent, and a nonaqueous solvent for said binder through an extruder.
15. The process according to claim 1, wherein said granules have a bulk density of at least 450 g/l.
16. The process according to claim 1, wherein said granules have a bulk density of about 450 g/l to about 650 g/l.
17. The process according to claim 1, wherein said granules comprise about 0.5 wt% of polymeric binder and about 1.0 wt% of a particulate flow aid and the balance acephate.
18. The process according to claim 1, wherein said granules comprise about 0.5 wt% of a polyethylene oxide binder, about 0.5 wt% silica and the balance acephate.
19. Compacted granules of a milled crystalline phosphoroamido(di)thioate solid wherein said solid has been jet milled (a) to an average crystal length of less than 150 μm and an average crystal width of less than 40 μm , or (b) to a particle size distribution having at least 67 wt% of said solid with a size of 4.6-88 μm .
20. The compacted granules of a milled phosphoroamido(di)thioate solid according to claim 19, wherein said solid further exhibits a mean size within the range of 10-29 μm .

21. The compacted granules of a milled phosphoroamido(di)thioate solid according to claim 19, wherein said solid further exhibits a mean size within the range of 12-25 μm .
- 5 22. The compacted granules of a milled phosphoroamido(di)thioate solid according to claim 19, wherein said solid further exhibits a mean size within the range of 15-23 μm .
- 10 23. The compacted granules of a milled phosphoroamido(di)thioate solid according to claim 19, wherein said solid has a particle size with a standard deviation of less than 40 μm .
- 15 24. The compacted granules of a milled phosphoroamido(di)thioate solid according to claim 19, wherein said solid has a particle size with a standard deviation of less than 35 μm .
- 20 25. The compacted granules of a milled phosphoroamido(di)thioate solid according to claim 19, wherein said solid has a particle size with a standard deviation of less than 30 μm .
- 25 26. The compacted granules of a milled phosphoroamido(di)thioate solid according to claim 19, wherein said solid has been jet milled to a particle size distribution whereby said phosphoroamido(di)thioate solid has been milled to a particle size distribution whereby at least 68 wt% of said solid has a particle size of 4.6-88 μm .
27. The granules according to claim 19, wherein said phosphoroamido(di)thioate solid has been milled to a particle size distribution whereby at least 70 wt% of said solid has a particle size of 4.6-88 μm .
- 30 28. The granules according to claim 19 wherein said phosphoroamido(di)thioate solid has been milled to a particle size distribution whereby at least 52 wt% of said solid has a size within the range of 4.6-37 μm and less than 14 wt% of said solid has a size within the range of 44-88 μm .
- 35 29. The process according to claim 19 wherein said phosphoroamido(di)thioate solid has been milled to a particle size distribution whereby at least 55 wt% of said solid has a size within the range of 4.6-37 μm and less than 13 wt% has a size within the range of 44-88 μm .

30. The process according to claim 19 wherein said phosphoroamido(di)thioate solid has been milled to a particle size distribution whereby at least 60 wt% of said solid has a size within the range of 4.6-37 μm and less than 11 wt% has a size within the range of 44-88 μm .

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31. The compacted granules of a milled phosphoroamido(di)thioate solid according to claim 19, wherein said granules have a bulk density of at least 450 g/l.

10 32. The compacted granules of a milled phosphoroamido(di)thioate solid according to claim 19, wherein said granules have a bulk density of about 450 g/l to about 650 g/l.

15 33. The compacted granules of a milled phosphoroamido(di)thioate solid according to claim 19, wherein said granules comprise a binder, a particulate flow aid, and acephate.

34. The compacted granules of a milled phosphoroamido(di)thioate solid according to claim 33, wherein said binder comprises a polyethylene oxide polymer.